



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,698	07/15/2003	Yoshiaki Oshima	1422-0595P	4920
2292	7590	02/22/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			MARCHESCHI, MICHAEL A	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/618,698

Applicant(s)

OSHIMA ET AL.

Examiner

Michael A Marcheschi

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/218,601.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7/15/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1755

The disclosure is objected to because of the following informalities:

The disclosure is objected to because it does not contain the continuing data as required (applicants must also include the status of the parent application (patent number) in said continuing data). The examiner acknowledges that the transmittal included the continuing data, but the specification must be amended according to the new rules.

Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grumbine et al.

Grumbine et al. teach in column 4, lines 54-55, column 6, line 50 and column 7, line 26- column 8, line 40, a polishing composition for polishing a substrate comprising an abrasive (silica) having a primary particle size less than 400nm, an oxidizing agent and phosphoric acid.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses phosphoric acid which is applicants claimed acid, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid

Art Unit: 1755

value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohashi.

Ohashi teaches in the abstract, column 5, lines 5-20 and column 6, lines 19-20, a polishing composition for polishing a substrate comprising an abrasive (silica) having a primary particle size less than 500nm, an oxidizing agent and phosphonic acid.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses phosphoric acid which is applicants claimed acid, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyata.

Art Unit: 1755

Miyata teaches in sections [0018]-[0020], section [0035], and sections [0043]-[0044], a polishing composition for polishing a substrate comprising an abrasive (silica) having a primary particle size less than the secondary size of 500nm, an oxidizing agent and a phosphonic acid compound (phosphoric acid or an phosphonic acid component).

The reference teaches a polishing composition comprising all of the claimed components because the reference uses phosphoric acid which is applicants claimed acid, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaufman et al.

Kaufman et al. teach in the abstract, column 5, line 25-column 6, line 33 and column 7, lines 30-33, a polishing composition for polishing a substrate comprising an abrasive (silica) having a primary particle size less than 400nm, an oxidizing agent and a phosphonic acid compound. Other acid, such as, sulfuric acid and phosphoric acid can be added.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses applicants claimed acids, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the

Art Unit: 1755

claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. in view of Grumbine et al.

Lee et al. teach in column 4, line 66-column 5, line 62, a polishing composition for polishing a substrate comprising an abrasive (silica), an oxidizing agent and at least one of the claimed acids.

Although Lee et al. does not teach the size of the abrasive, this concept is obvious to the skilled artisan because Grumbine et al. teaches that silica abrasives for polishing are generally known to have the claimed size, thus making said size obvious. With this being obvious, the primary reference teaches a polishing composition comprising all of the claimed components because the reference uses the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al. in view of Ohashi.

Tsuchiya et al. teach in column 7, line 10-column 8, line 50, a polishing composition for polishing a substrate comprising an abrasive (colloidal silica), an oxidizing agent and at least one of the claimed acids.

Although Tsuchiya et al. does not teach the size of the colloidal silica abrasive, this concept is obvious to the skilled artisan because Ohashi teaches that colloidal silica abrasives for polishing are generally known to have the claimed size, thus making said size obvious. With this being obvious, the primary reference teaches a polishing composition comprising all of the claimed components because the reference uses the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/12740 in view of Grumbine et al.

The WO reference teaches in the abstract, page 5, lines 3-14 and page 10, lines 5-13, a polishing composition for polishing a substrate comprising an abrasive (silica), an oxidizing agent and at least one of the claimed acids.

Although the WO reference does not teach the size of the abrasive, this concept is obvious to the skilled artisan because Grumbine et al. teaches that silica abrasives for polishing are generally known to have the claimed size, thus making said size obvious. With this being obvious, the primary reference teaches a polishing composition comprising all of the claimed components because the reference uses the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7-233485.

The JP reference teaches in the abstract, a polishing composition for polishing a substrate comprising an abrasive, an oxidizing agent and at least one of the claimed acids.

The reference teaches a polishing composition comprising all of the claimed components because the reference uses applicants claimed acids, thus it has the claimed pK1 value. With respect to the size of the abrasive, the values disclosed by the reference broadly encompass the claimed values making them obvious. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the reference abrasive content and size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.



Art Unit: 1755

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5 and 13-16 of copending Application No. 10/726,581. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components because the copending claims use the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the copending claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 4-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of copending Application No. 10/857,841. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components and values.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of copending Application No. 10/727,571. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components because the copending claims use the claimed acids, thus it has the claimed pK1 value. In addition, the copending specification defines what is meant by acid. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the copending claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims all the claims of copending Application No. 10/753,460. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The copending claims define polishing compositions which contain all of the instantly claimed components because the copending claims use the claimed acids, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the copending claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of U.S. Patent No. 6,620,216. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious

Art Unit: 1755

the instant claims. The patent claims define polishing compositions which contain all of the instantly claimed components and values. Although the instant case is identified as a divisional, the instant claims were never restricted, thus this rejection is proper.

Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of U.S. Patent No. 6,818,031. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. The patented claims define polishing compositions which contain all of the instantly claimed components because the patented claims use the claimed acid, thus it has the claimed pK1 value. With respect to the acid value of the composition, it is the examiners position that when this value is calculated according to the instant specification with the patented claims size, this value is within the claimed range. In addition, since the composition is the same, this characteristic is expected because the same composition is expected to yield the same value absent evidence to the contrary.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

**"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re***

Art Unit: 1755

***LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.**

**"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".**

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)".

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548.

Evidence of unexpected results must be commensurate in scope with the subject matter claimed.

*In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/17/05  
MM

Michael A Marcheschi

